

CLAIMS

1. A liquid dispensing valve, characterized in that it comprises: a body portion (20) hermetically mounted to a free end (12) of a discharge nozzle (11) of a reservoir (10) and defining a seat (22); a rod (30) mounted through the body portion (20), carrying a seal (31) and being selectively displaced between a closing position in which the seal (31) is seated on the seat (22), blocking the discharge of liquid from the reservoir (10), and a maximum opening position, in which the seal (31) is spaced from the seat (22), allowing the discharge of the liquid; a spring means (40) mounted to the body portion (20) and forcing the rod (30) to the closing position; a cap portion (50) hermetically affixed to the body portion (20) downstream the seat (22) and around the rod (30), and internally defining a discharge chamber (C); and an elongated spout (55) having a discharge end (55a) turned downwards, said cap portion (50) and elongated spout (55) being configured and dimensioned so that when the seat (22) is closed by the seal (31), the mass of residual liquid contained in the discharge chamber (C) forms, gravitationally inside the latter, a vacuum which is sufficient to maintain said mass of liquid retained upstream the discharge end (55a) of the elongated spout (55).
2. The valve as set forth in claim 1, characterized in that the cap portion (50) presents a tubular shape, having an end (51) hermetically affixed to the body portion (20) and an opposite end (52) hermetically affixed to an end portion (30a) of the rod (30) external to the body portion (20).
3. The valve as set forth in claim 2, characterized in that the cap portion (50) defines a discharge chamber (C) in annular tubular shape around the end portion

(30a) of the rod (30) external to the body portion (20).

4. The valve as set forth in claim 3, characterized in that the opposite end (52) of the cap portion (50) is defined by an annular wall internally and peripherally coupled to the adjacent end portion (30a) of the rod (30).

5. The valve as set forth in claim 1, characterized in that the cap portion (50) is formed in elastomeric material.

6. The valve as set forth in claim 5, characterized in that the cap portion (50) and the elongated spout (55) are formed in a single piece.

7. The valve as set forth in claim 1, characterized in that the body portion (20) further carries, externally, a casing (60) laterally involving the cap portion (50) and the elongated spout (55).

8. The valve as set forth in claim 1, characterized in that the elongated spout (55) has an inlet end (55b) radially opened to the inside of the discharge chamber (C) and united to the discharge end (55a) by means of an intermediary portion (55c) which is approximately orthogonal to the axis of both the inlet end (55b) and the discharge end (55a).

9. The valve as set forth in claim 1, characterized in that the rod (30) is axially displaced between the closing and opening positions of the dispensing valve (V).

10. The valve as set forth in claim 9, characterized in that the seal (31) takes the form of an elastic ring mounted in a circumferential channel of the rod (30) disposed upstream the seat (22).

11. The valve as set forth in claim 10, characterized in that the rod (30) presents an axial extension (36) internal to the discharge nozzle (11) of the reservoir

(10) and carrying, at its free end portion, an additional seal (33), said discharge nozzle (11) carrying, internally, an additional seat (76) axially spaced from the seat (22) and against which the additional seal (33) is seated when the rod (30) is displaced to its closing position.

5 12. The valve as set forth in claim 11, characterized in that the additional seat (76) is defined in an end of a tubular sleeve (70), having the opposite end widened and hermetically affixed to the free end (12) 10 of the discharge nozzle (11).

13. The valve as set forth in claim 12, characterized in that the body portion (20) of the dispensing valve (V) presents a tubular axial extension (21) provided 15 with an internal thread (23) to be engaged with an external thread (13) provided in the free end (12) of the discharge nozzle (11).

14. The valve as set forth in claim 13, characterized in that the body portion (20) carries, in an internal 20 annular face, an annular gasket (25) to be simultaneously pressed against the opposite end of the tubular sleeve (70) and against the free end (12) of the discharge nozzle (11) when the dispensing valve (V) is mounted to the latter.

25 15. The valve as set forth in claim 1, characterized in that the body portion (20) incorporates, in its tubular axial extension (21), a tongue (27) to be seated against a stop means (17) which is radially and externally incorporated to the discharge nozzle (11) 30 when the dispensing valve (V) is completely engaged to the free end (12) of the discharge nozzle (11), maintaining the elongated spout (55) turned downwards.

16. The valve as set forth in claim 9, characterized 35 in that the spring means (40) is defined by a helical spring mounted around the end portion (30a) of the rod

(30), external to the body portion (20), having an end seated against the latter and an opposite end seated against a peripheral salience (32) incorporated to said end portion (30a) of the rod (30).